

REMARKS

Claims 7, 10, 13 and 17 are pending and under consideration in the above-identified application. Claims 1-6, 8-9 and 11-12 were previously cancelled.

In the Final Office Action of January 7, 2011, claims 7, 10, 13 and 17 were rejected.

With this amendment, claims 7 and 17 are amended.

I. 35 U.S.C. § 112 Rejection

Claims 7, 10, 13 and 17 were rejected under 35 U.S.C. 112, second paragraph.

With this amendment, claims 7 and 17 are amended taking into consideration the Examiner's comments. Accordingly, the Applicants respectfully request the withdrawal of this rejection.

II. 35 U.S.C. § 103 Obviousness Rejection of Claims

Claims 7, 10, 13 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Narang et al.* (US 6,168,885) in view of *Schneider et al.* (US 6,180,281) in view of *Gozdz et al.* (US 5,840,087) in view of *Kumeuchi et al.* (US 6,156,080). Applicant respectfully traverses this rejection.

In relevant part, each of the independent claims 7 and 17 now recites sealing the wound electrode in a film pack formed by laminating a nylon layer, an aluminum layer and a polypropylene layer on the wound electrode and welding an outer end of the wound electrode and after sealing said wound electrodes into the film pack, subjecting said wound electrodes to heat treatment so that said gel-electrolyte layers formed on said positive electrode and said gel-electrolyte layers formed on said negative electrode are integrated with each other into one continuous seamless layer by heating the laminated electrode in an atmosphere having a temperature of between 70 and 100 degrees C.

In the Office Action of January 7, 2011, the Examiner correctly asserts that Narang does not teach "that the electrode/electrolyte sheets are wound, inserted, and sealed into a film pack prior to heat-treatment." See, Office Action of January 7, 2010 at Page 3.

Narang, Schneider, Gozdz and *Kumeuchi* fail to cure this defect. Instead, *Narang* discloses assembling a battery by laminating two polymer electrolyte coated electrodes together

before See, U.S. Pat. No. US 6,168,885, Col 11, l. 4-11. *Schneider* discloses an electrode inserted into a flexible aluminized plastic battery case without disclosing any lamination or heat treating. See, U.S. Pat. No. 6,180,281, Col. 11, l. 10-12. *Gozdz* discloses pressing an electrode with rollers before heating the electrode with a heater operating at 120 deg C to 150 deg C without disclosing any lamination of the electrode. See, U.S. Pat. No. 5,840,087, Col. 4, l. 58-Col. 5, l. 15. *Kumeuchi* discloses wrapping a negative electrode and a positive electrode in a plastic sheet, compressing the negative and positive electrodes and the plastic sheet together and then heating the electrode before placing the electrode into a metal case.

These references cannot be fairly viewed as disclosing sealing the wound electrode in a film pack formed by laminating a nylon layer, an aluminum layer and a polypropylene layer on the wound electrode and welding an outer end of the wound electrode and after sealing said wound electrodes into the film pack, subjecting said wound electrodes to heat treatment so that said gel-electrolyte layers formed on said positive electrode and said gel-electrolyte layers formed on said negative electrode are integrated with each other into one continuous seamless layer by heating the laminated electrode in an atmosphere having a temperature of between 70 and 100 degrees C, because none of the references disclose anything pertaining to the composition of a film pack. Further, none of the references disclose heating a laminated electrode in an atmosphere having a temperature between 70 and 100 degrees .

As the Applicant's specification discloses, by sealing the wound electrode in a film pack formed by laminating a nylon layer, an aluminum layer and a polypropylene layer on the wound electrode and welding an outer end of the wound electrode and after sealing said wound electrodes into the film pack, subjecting said wound electrodes to heat treatment so that said gel-electrolyte layers formed on said positive electrode and said gel-electrolyte layers formed on said negative electrode are integrated with each other into one continuous seamless layer by heating the laminated electrode in an atmosphere having a temperature of between 70 and 100 degrees C, a battery having a large discharge capacity and high energy density is realized. See, Specification, Page 21, l. 6-10.

Therefore, because *Narang*, *Schneider*, *Gozdz*, *Kumeuch* and any combination of them fail to disclose or even fairly suggest each feature of claims 7 and 17, the rejection of claims 7 and 17 cannot stand. Because claims 10 and 13 depend, either directly or indirectly, from claims 7 and 17, they are allowable for at least the same reason.

III. Conclusion

In view of the above amendments and remarks, Applicant submits that all claims are clearly allowable over the cited prior art, and respectfully requests early and favorable notification to that effect.

Respectfully submitted,

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